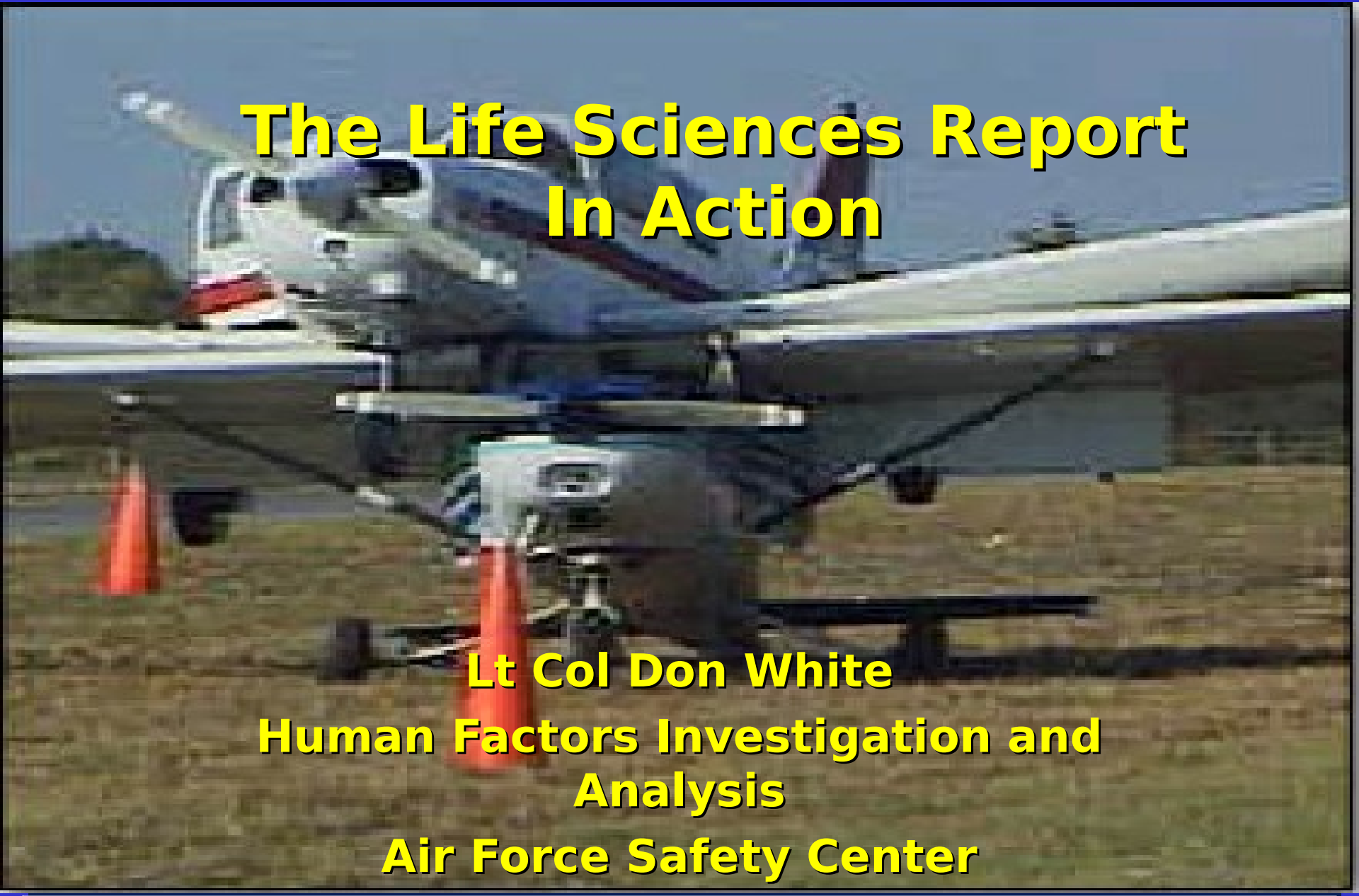

The Life Sciences Report In Action

Lt Col Don White

Human Factors Investigation and Analysis

Air Force Safety Center

U. S. AIR FORCE

The Life Sciences Report

- **Computer program to replace the AF 711gA**
- **Logic tree format instead of “fill in the blank”**
- **Shift in emphasis**
  - Less on “Smokin an a Drankin”
  - More on Human Factors
  - Streamlined report
  - Overall less in report, more in narrative

Why a Computer Program?

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- Electronic therefore easier to duplicate and transmit
- Easier data entry
- Pointers for “slicing the pie”

Program Download

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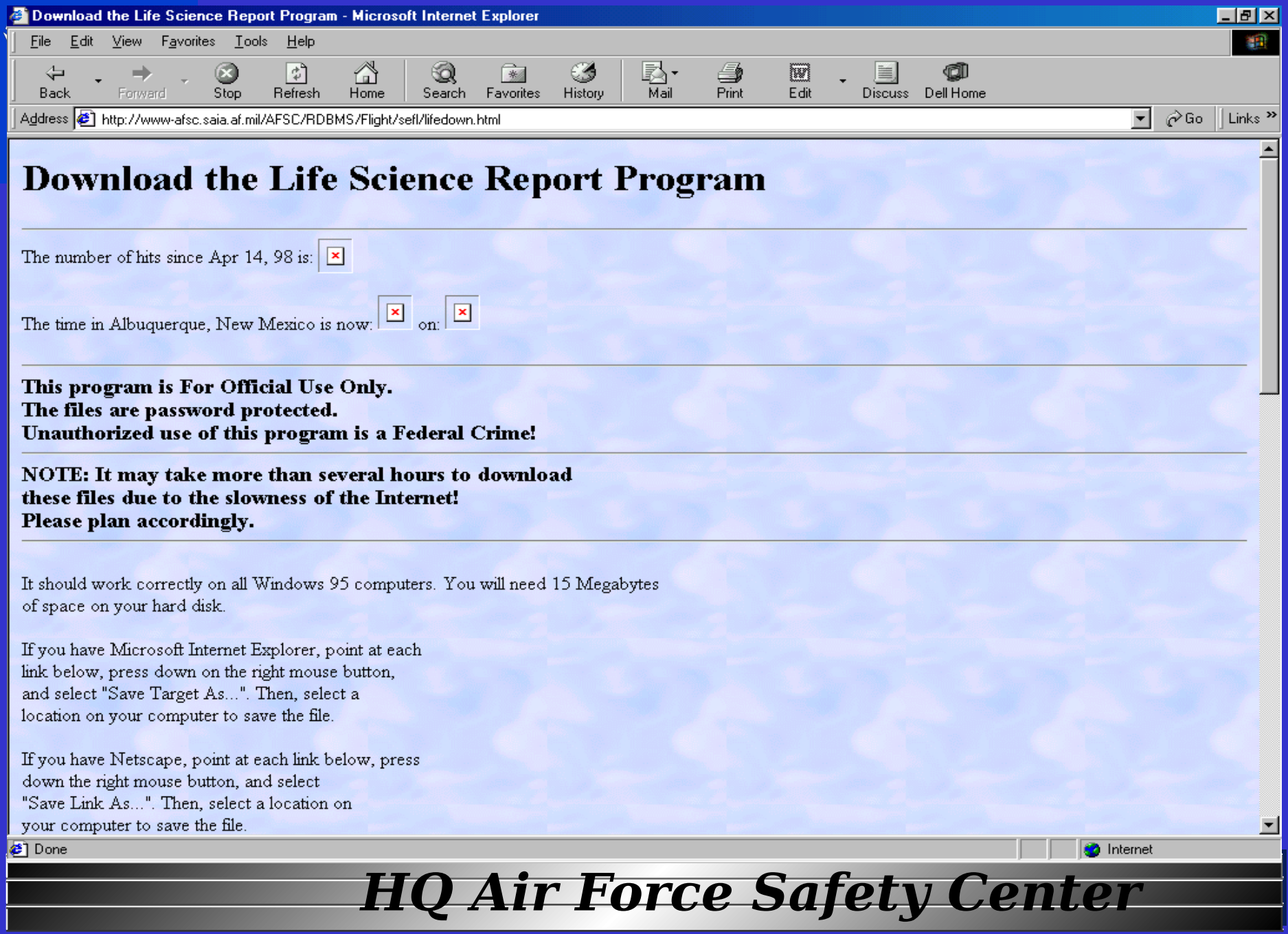
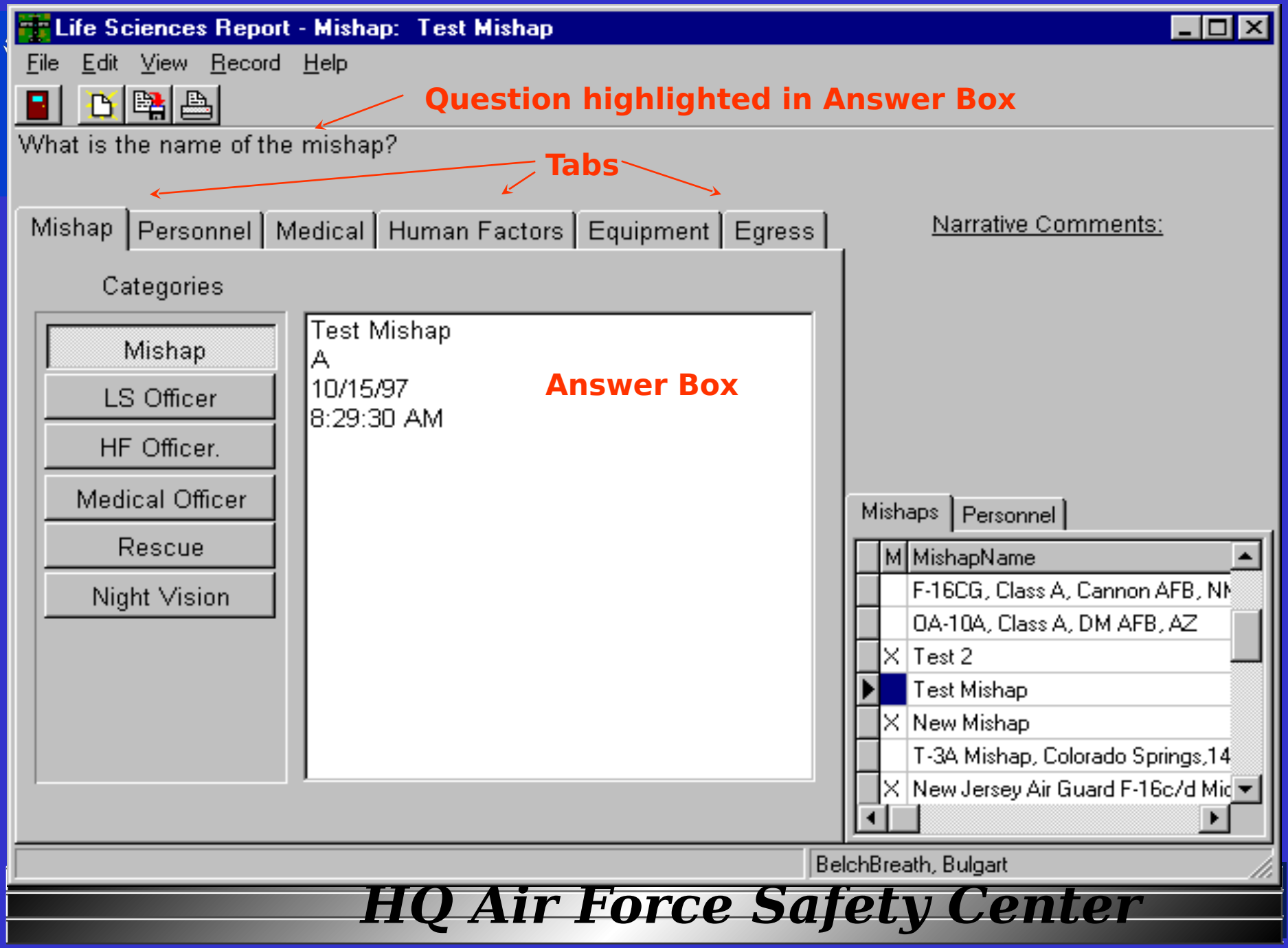
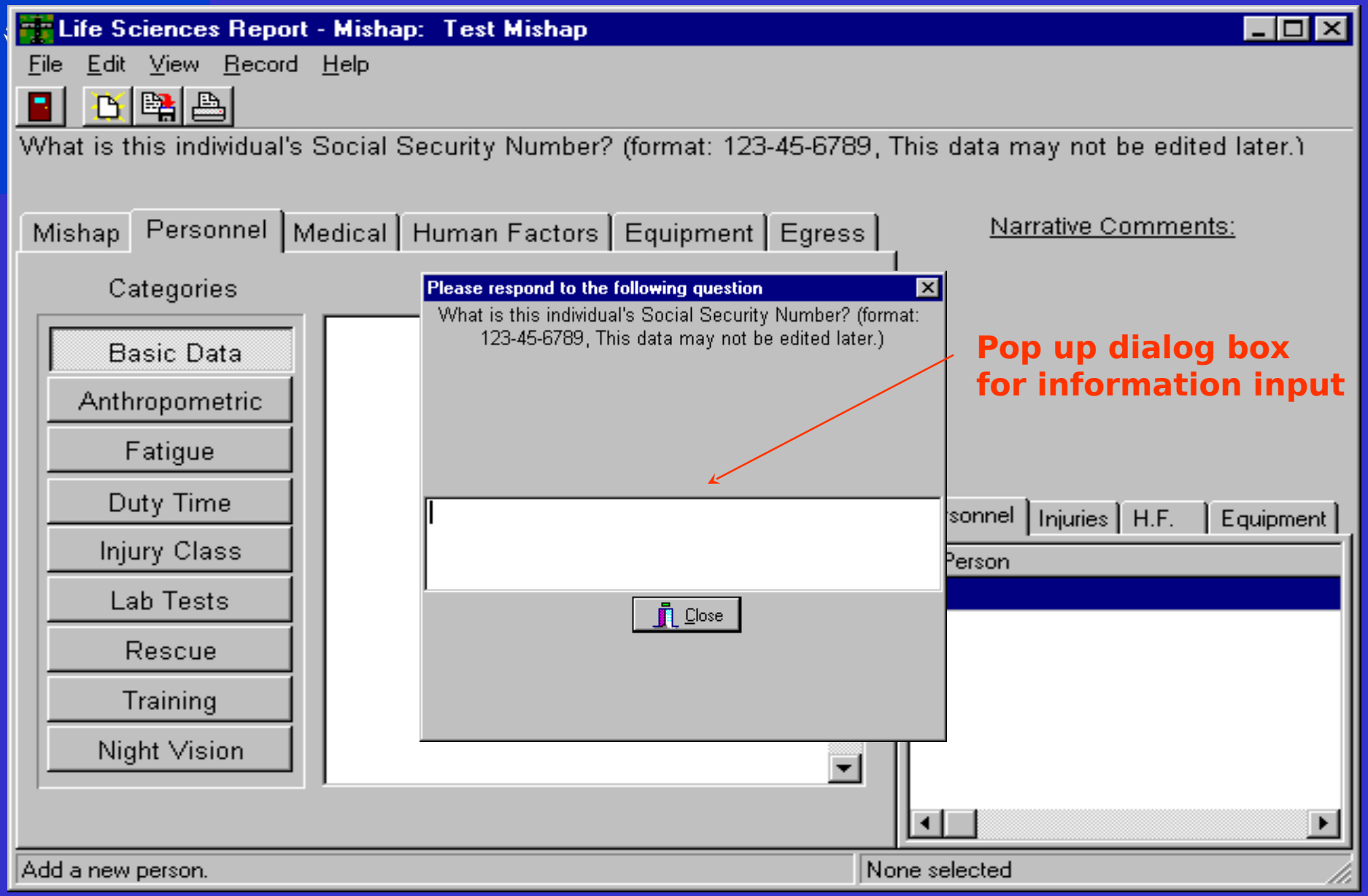
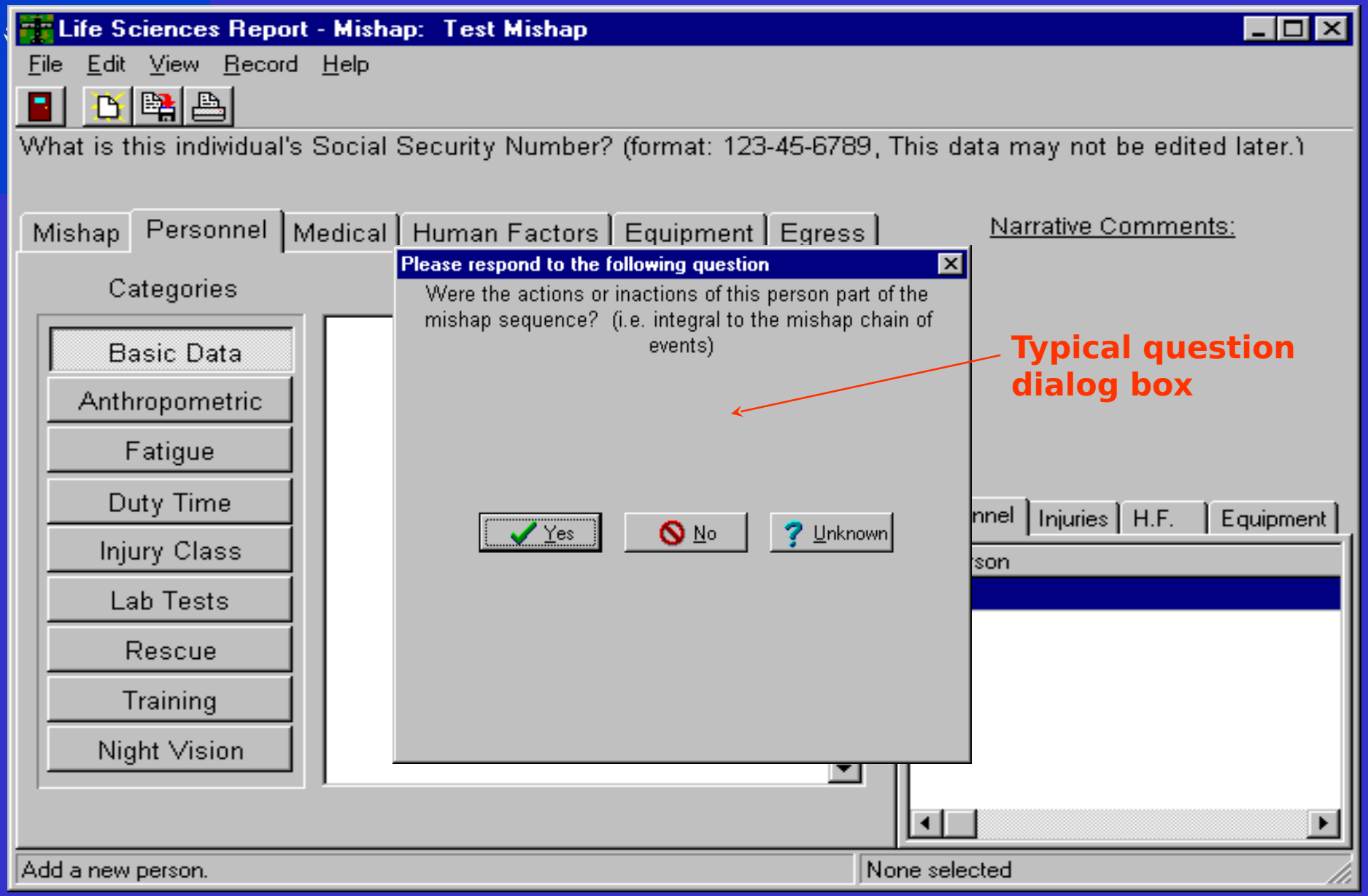
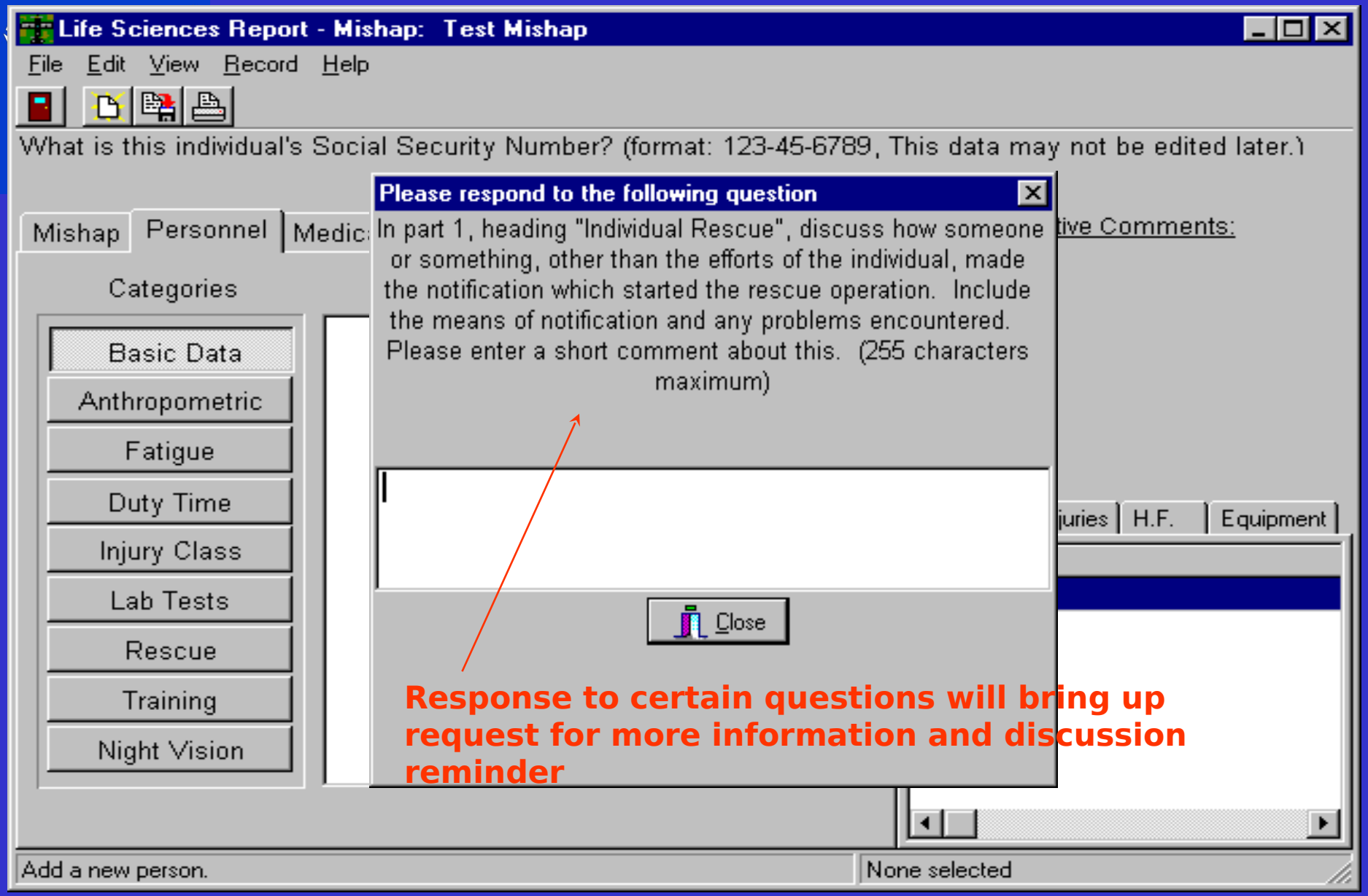
- Program available by three download files
- Files located on Safety Center web page
  - www-afsc.saia.af.mil
  - Click on aviation safety division
  - Click on life sciences branch
- Downloaded as self-executing zip files to C:
- Expand onto 3 floppy disks
- Install by double click on setup.exe file on disk 1
- Direction for installation on web page
- Don’t forget to download the instruction book
- The zip files are password protected: sandia40

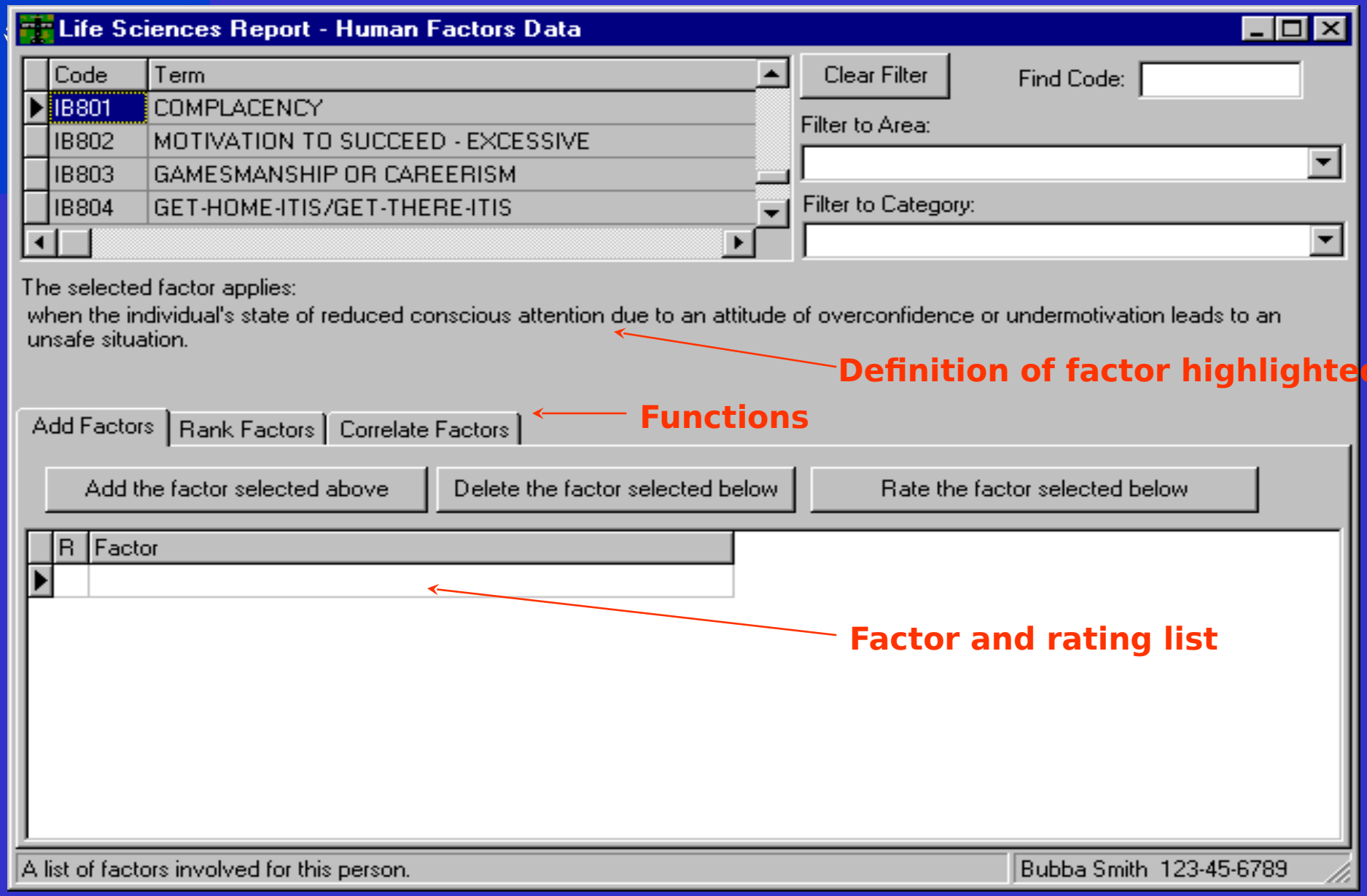

Download the Life Science Report Program - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss Dell Home
Address http://www-afsc.saia.af.mil/AFSC/RDBMS/Flight/sefl/lifedown.html
Go Links
Download the Life Science Report Program
The number of hits since Apr 14, 98 is:
The time in Albuquerque, New Mexico is now: on:
This program is For Official Use Only.
The files are password protected.
Unauthorized use of this program is a Federal Crime!
NOTE: It may take more than several hours to download
these files due to the slowness of the Internet!
Please plan accordingly.
It should work correctly on all Windows 95 computers. You will need 15 Megabytes
of space on your hard disk.
If you have Microsoft Internet Explorer, point at each
link below, press down on the right mouse button,
and select "Save Target As...". Then, select a
location on your computer to save the file.
If you have Netscape, point at each link below, press
down the right mouse button, and select
"Save Link As...". Then, select a location on
your computer to save the file.
Done
Internet


Life Sciences Report - Mishap: Test Mishap
File Edit View Record Help
Question highlighted in Answer Box
What is the name of the mishap?
Tabs
Mishap
Personnel
Medical
Human Factors
Equipment
Egress
Narrative Comments:
Categories
Mishap
LS Officer
HF Officer.
Medical Officer
Rescue
Night Vision
Test Mishap
A
10/15/97
8:29:30 AM
Answer Box
Mishaps
Personnel
M
MishapName
F-16CG, Class A, Cannon AFB, NM
OA-10A, Class A, DM AFB, AZ
Test 2
Test Mishap
New Mishap
T-3A Mishap, Colorado Springs,14
New Jersey Air Guard F-16c/d Mic
BelchBreath, Bulgart
HQ Air Force Safety Center


Life Sciences Report - Mishap: Test Mishap
File Edit View Record Help
What is this individual's Social Security Number? (format: 123-45-6789, This data may not be edited later.)
Mishap Personnel Medical Human Factors Equipment Egress
Narrative Comments:
Categories
Basic Data
Anthropometric
Fatigue
Duty Time
Injury Class
Lab Tests
Rescue
Training
Night Vision
Please respond to the following question
What is this individual's Social Security Number? (format: 123-45-6789, This data may not be edited later.)
Close
Pop up dialog box for information input
sonnel Injuries H.F. Equipment
Person
Add a new person.
None selected


Life Sciences Report - Mishap: Test Mishap
File Edit View Record Help
What is this individual's Social Security Number? (format: 123-45-6789, This data may not be edited later.)
Mishap Personnel Medical Human Factors Equipment Egress
Narrative Comments:
Please respond to the following question
Were the actions or inactions of this person part of the mishap sequence? (i.e. integral to the mishap chain of events)
Yes
No
Unknown
Typical question dialog box
Categories
Basic Data
Anthropometric
Fatigue
Duty Time
Injury Class
Lab Tests
Rescue
Training
Night Vision
nnel Injuries H.F. Equipment
son
Add a new person.
None selected


Life Sciences Report - Mishap: Test Mishap
File Edit View Record Help
What is this individual's Social Security Number? (format: 123-45-6789, This data may not be edited later.)
Please respond to the following question
In part 1, heading "Individual Rescue", discuss how someone or something, other than the efforts of the individual, made the notification which started the rescue operation. Include the means of notification and any problems encountered. Please enter a short comment about this. (255 characters maximum)
Close
Mishap
Personnel
Categories
Basic Data
Anthropometric
Fatigue
Duty Time
Injury Class
Lab Tests
Rescue
Training
Night Vision
H.F.
Equipment
Add a new person.
None selected
Response to certain questions will bring up request for more information and discussion reminder


Life Sciences Report - Human Factors Data
Code
Term
IB801
COMPLACENCY
IB802
MOTIVATION TO SUCCEED - EXCESSIVE
IB803
GAMESMANSHIP OR CAREERISM
IB804
GET-HOME-ITIS/GET-THERE-ITIS
Clear Filter
Find Code:
Filter to Area:
Filter to Category:
The selected factor applies:
when the individual's state of reduced conscious attention due to an attitude of overconfidence or undermotivation leads to an unsafe situation.
Definition of factor highlighted
Add Factors
Rank Factors
Correlate Factors
Functions
Add the factor selected above
Delete the factor selected below
Rate the factor selected below
R
Factor
Factor and rating list
A list of factors involved for this person.
Bubba Smith 123-45-6789

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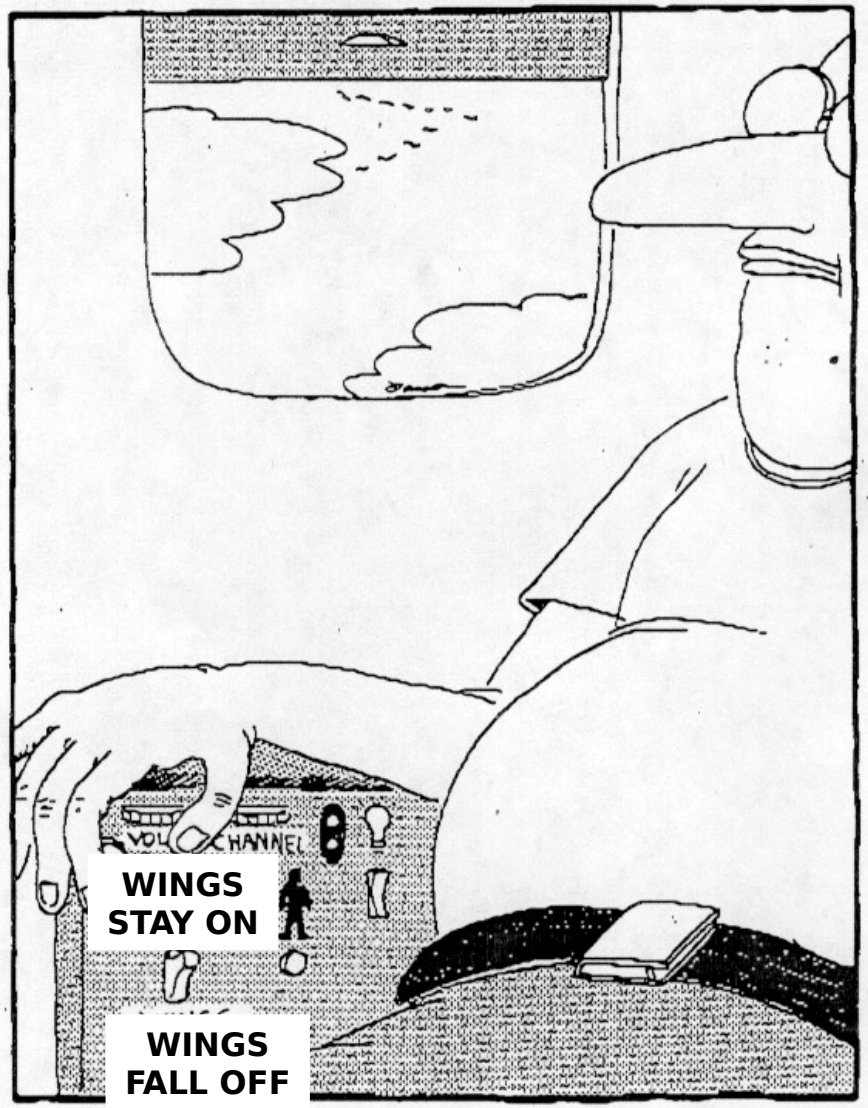
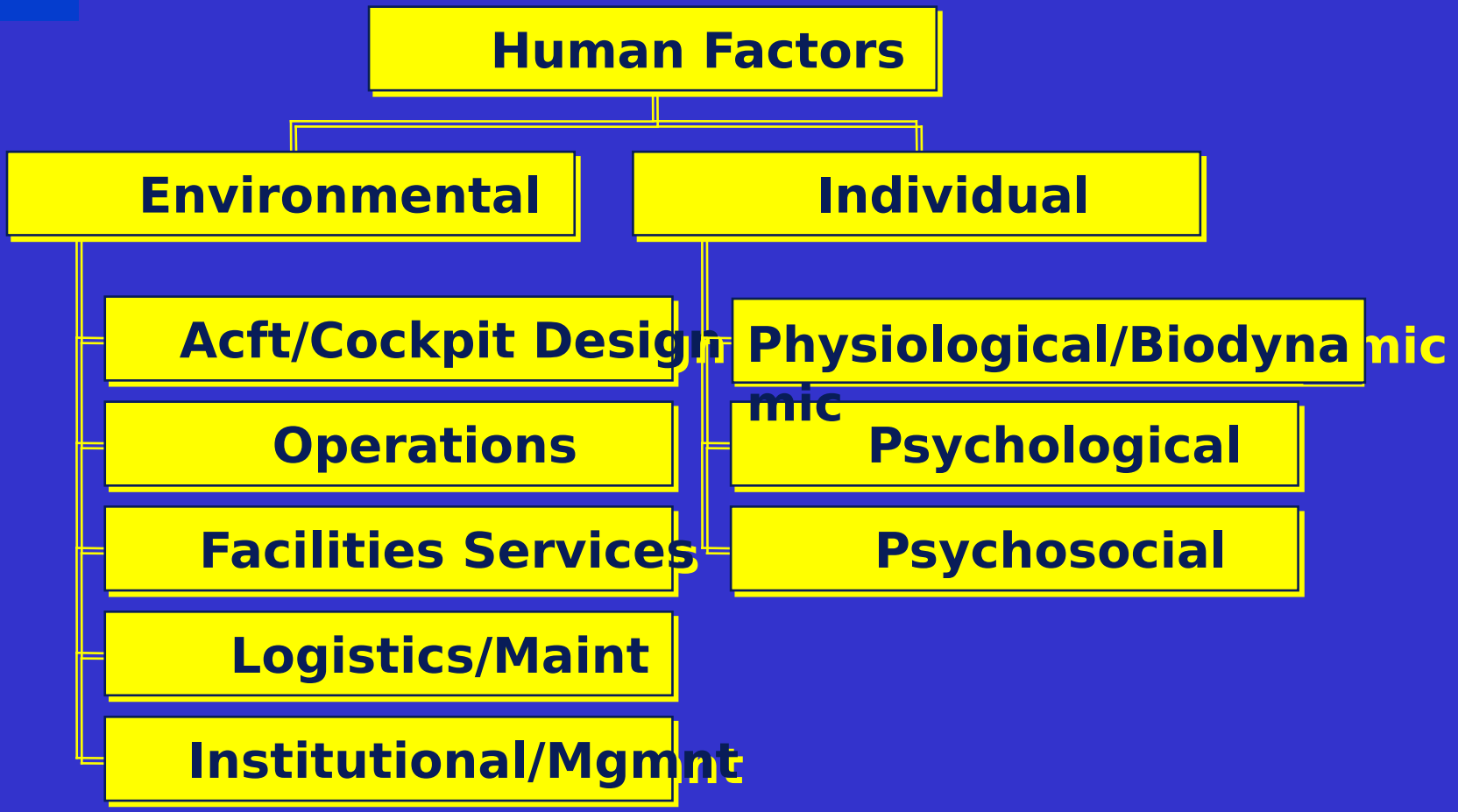


Fumbling for his recliner button, Ted unwittingly instigates a disaster

nter

Human Factors Taxonomy



Human Factors - Rate Factors, Rank "4's", & Build Matrix

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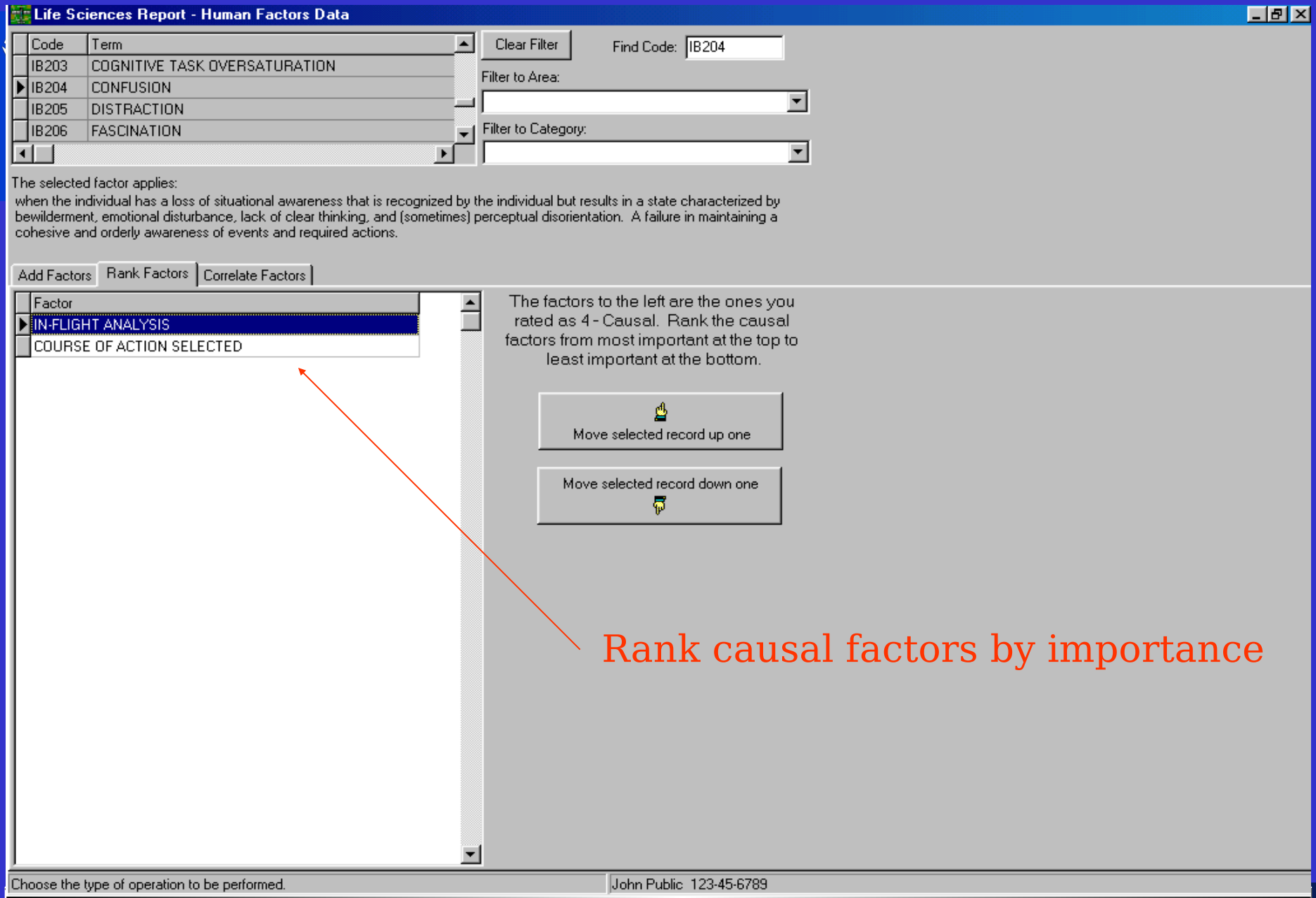
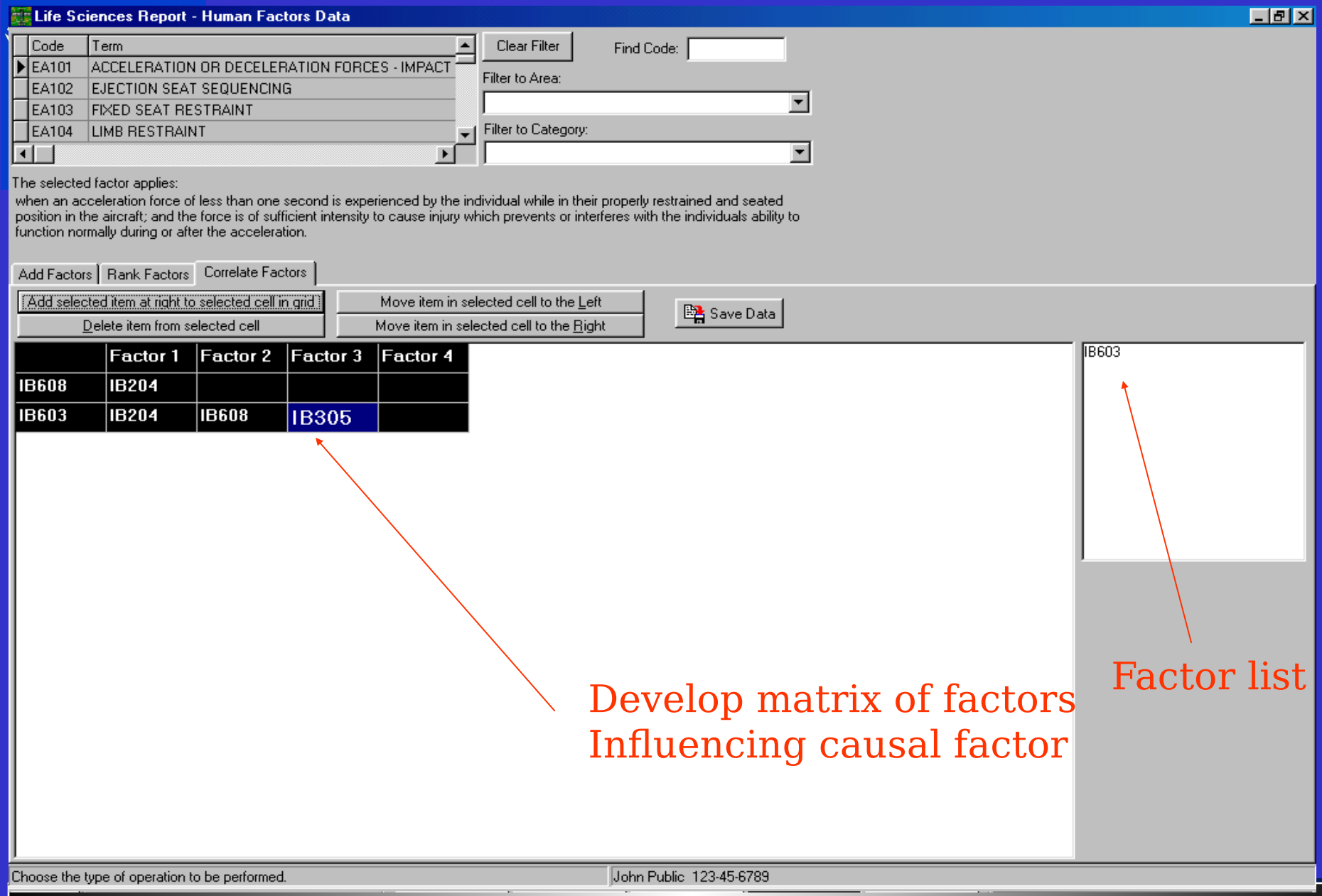
- **Rate human factors involved in mishap on a scale from 0 to 4**
  - 0 = present but not relevant
  - 1 = Minimal Contribution
  - 2 = Minor Contribution
  - 3 = Major Contribution
  - 4 = Causal
- **Rank "4s" from most to least important in mishap**
- **Build correlation matrix**

Note: Use only factors that were rated. Factors may be used only once in a row, but can be used more than once if placed in different rows.

	#1 related factor	#2 related factor	#3 related factor	#4 related factor	etc.
#1 factor rated "4"					
#2 factor rated "4"					
#3 factor rated "4"					
etc.					


Life Sciences Report - Human Factors Data
Code
Term
IB203
COGNITIVE TASK OVERSATURATION
IB204
CONFUSION
IB205
DISTRACTION
IB206
FASCINATION
Clear Filter
Find Code:
IB204
Filter to Area:
Filter to Category:
The selected factor applies:
when the individual has a loss of situational awareness that is recognized by the individual but results in a state characterized by bewilderment, emotional disturbance, lack of clear thinking, and (sometimes) perceptual disorientation. A failure in maintaining a cohesive and orderly awareness of events and required actions.
Add Factors
Rank Factors
Correlate Factors
Factor
IN-FLIGHT ANALYSIS
COURSE OF ACTION SELECTED
The factors to the left are the ones you rated as 4 - Causal. Rank the causal factors from most important at the top to least important at the bottom.
Move selected record up one
Move selected record down one
Rank causal factors by importance
Choose the type of operation to be performed.
John Public 123-45-6789


Life Sciences Report - Human Factors Data
Code
Term
EA101
ACCELERATION OR DECELERATION FORCES - IMPACT
EA102
EJECTION SEAT SEQUENCING
EA103
FIXED SEAT RESTRAINT
EA104
LIMB RESTRAINT
Clear Filter
Find Code:
Filter to Area:
Filter to Category:
The selected factor applies:
when an acceleration force of less than one second is experienced by the individual while in their properly restrained and seated position in the aircraft; and the force is of sufficient intensity to cause injury which prevents or interferes with the individuals ability to function normally during or after the acceleration.
Add Factors
Rank Factors
Correlate Factors
Add selected item at right to selected cell in grid
Delete item from selected cell
Move item in selected cell to the Left
Move item in selected cell to the Right
Save Data
Factor 1
Factor 2
Factor 3
Factor 4
IB608
IB204
IB603
IB204
IB608
IB305
IB603
Develop matrix of factors
Influencing causal factor
Factor list
Choose the type of operation to be performed.
John Public 123-45-6789
HQ Air Force Safety Center

Close

Comments for Part 1 of the narrative:

Mishap: Test 2

In part 1, heading "Individual Rescue", fully discuss how the search and rescue operations caused new injuries or increased the severity of existing injuries to this individual.

In part 1, heading "Individual Rescue", discuss how the individual made rescue notification. Include a ranking of the most to least useful notification technique used, problems with equipment, and problems with using the equipment correctly.

In part 1, heading "Individual Rescue", discuss how someone or something, other than the efforts of the individual, made the notification which started the rescue operation. Include the means of notification and any problems encountered.

In part 1, heading "Individual Rescue", discuss how the individual made rescue notification. Include a ranking of the most to least useful notification technique used, problems with equipment, and problems with using the equipment correctly.

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Program “Gotchas”

- **Five fields can not be edited for identification purposes**
  - Mishap name
  - Mishap class
  - Mishap time
  - Mishap date
  - Individual Social Security Number
- **The “new” button**
  - Person
  - Injury
  - Equipment
- **Do the HF worksheets before entering HF data**

Saving Data/Printing Reports

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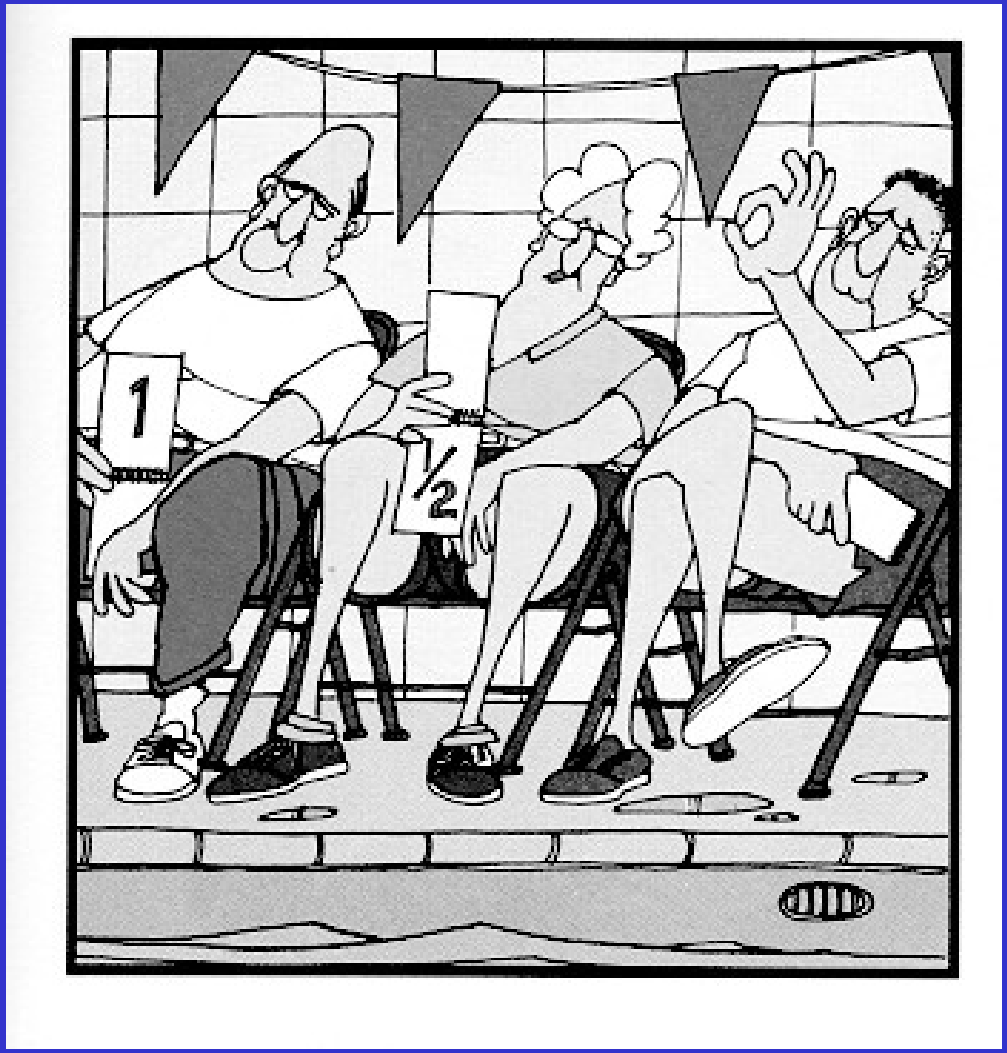
- **The program automatically saves all changes**
- **Can protect data by using export function**
  - Will create a zip file of all data
  - Don't reload data each time
  - Send final export to the Life Sciences Branch
- **Program will print a report with the data entered**
  - Will request a header (optional)
  - Will request page number to start on

Exciting?



Questions?